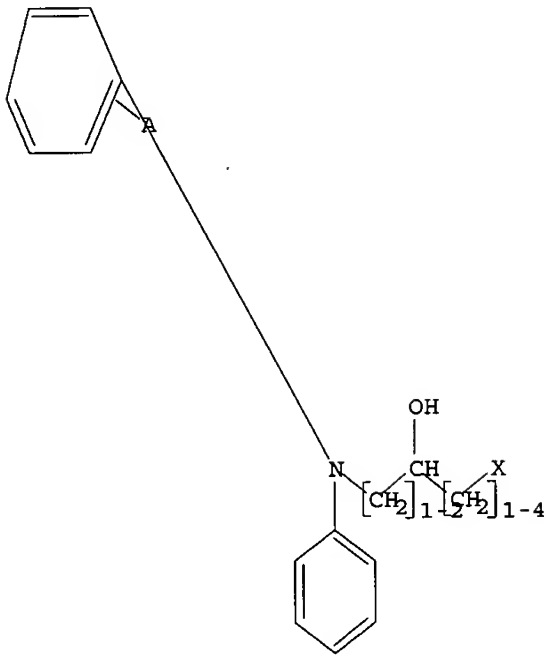
09/288,556

L12 STR



G1 H,Me,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu

Structure attributes must be viewed using STN Express query preparation.

=> s l12 sss full
FULL SEARCH INITIATED 13:37:59 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 461 TO ITERATE

100.0% PROCESSED 461 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

L13 2 SEA SSS FUL L12

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	151.35	813.27

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.46

FILE 'CAPLUS' ENTERED AT 13:38:04 ON 05 SEP 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 5 Sep 2003 VOL 139 ISS 11
FILE LAST UPDATED: 4 Sep 2003 (20030904/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l13
L14 2 L13

=> d 1-2 l13 ibib abs hitstr
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:n

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	813.69

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.46

FILE 'CAPLUS' ENTERED AT 13:38:31 ON 05 SEP 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 5 Sep 2003 VOL 139 ISS 11
FILE LAST UPDATED: 4 Sep 2003 (20030904/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

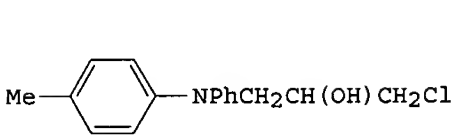
=> s l13
L15 2 L13

=> d l14 1-2 ibib abs hitstr

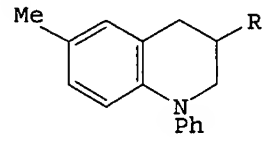
L14 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1976:446348 CAPLUS
DOCUMENT NUMBER: 85:46348
TITLE: 3-Chloro-2-hydroxypropyl derivatives of aromatic amines and their reaction products. XVII.

4-Methyldiphenylamine

AUTHOR(S): Kutkevicius, S.; Samarskis, E.
CORPORATE SOURCE: Kaunas. Politekh. Inst. im. Sneckusa, Kaunas, USSR
SOURCE: Lietuvos TSR Aukstuju Mokyklu Mokslo Darbai, Chemija ir Chemine Technologija (1975), 17, 151-4
CODEN: LAMCAJ; ISSN: 0459-3391
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI



I

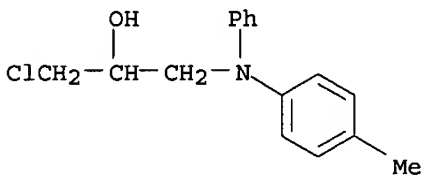


II

AB Addn. of epichlorohydrin to p-MeC6H4NHPh in AcOH 6 days at 70.degree. gave 80% I. A similar reaction 5 days at 150-5.degree. gave 75.4% II (R = OH) which was dehydrated by polyphosphoric acid to give 27% II (R = H). Acylation of II (R = OH) gave 50-3% II (R = AcO, BzO, p-NO2C6H4CO2).

IT **59836-08-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and cyclization of)

RN 59836-08-7 CAPLUS
CN 2-Propanol, 1-chloro-3-[(4-methylphenyl)phenylamino]- (9CI) (CA INDEX NAME)



L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1969:37343 CAPLUS
DOCUMENT NUMBER: 70:37343
TITLE: N-(.gamma.-Chloro-.beta.-hydroxylpropyl)arylamines and their reaction products. VI. N-Mono- and N,N-bis(.beta.,.gamma.-epoxypropyl)amines

AUTHOR(S): Kutkevicius, S.; Rutkauskas, S.
CORPORATE SOURCE: Kaunas. Politekh. Inst., Kaunas, USSR
SOURCE: Lietuvos TSR Aukstuju Mokyklu Mokslo Darbai, Chemija ir Chemine Technologija (1967), 8, 99-104
CODEN: LAMCAJ; ISSN: 0459-3391
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Powd. NaOH (16 g.) was shaken with 26 g. Ph2NCH2CH(OH)CH2Cl (I) in 50 cc. HCONMe2 10-20 min. with cooling, to give 82% N-(.beta.,.gamma.-epoxypropyl)diphenylamine (II), b1-2 158-9.degree.. Similarly, 2-(.beta.,.gamma.-epoxypropyl)-2'-aminodiphenylamine (III), and N,N'-diphenyl-N,N'-bis(.beta.,.gamma.-epoxypropyl)-p-phenylenediamine (IV) was obtained. I (0.2 mole) in 0.6-1 mole HCONMe2 was shaken with 0.8-1 mole powd. Na 10-15 min., the mixt. dild. with 20-30 cc. H2O, heated at

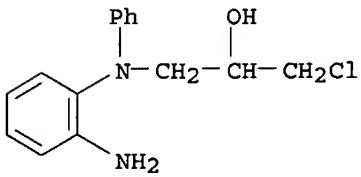
40-60.degree. 2-3 hrs. with stirring to give 73% Ph2NCH2CH(OH)CH2NMe2, m. 48-9.degree. (petroleum ether or alc.). Similarly the following ArNHCH2CH(OH)CH2NMe2 were obtained (Ar, % yield and m.p. given): Ph, 62, 81-2.degree.; p-MeC6H4, 81, 71-2.degree.; 1-naphthyl, -, 81-2.degree.; o-PhNHC6H4, 67, 102-3.degree.. Similarly prepd. was N,N'-diphenyl-N,N'-bis(.gamma.-dimethylamino-.beta.-hydroxypropyl)-p-phenylenediamine, m. 129-31.degree.. Epichlorohydrin (V) 37 g. and 36.8 g. 2-aminodiphenylamine was kept 45 hrs., the mixt. was dissolved in amyl alc. and satd. with HCl to give 27.6 g. o-H2NC6H4NPhCH2CH(OH)CH2Cl.cntdot. HCl (VI), m. 135-6.degree. (amyl alc.). VI (30 g.), 12 g. powd. NaOH, and 0.6 l. Et2O was shaken and refluxed 3 hrs. to give 17.8 g. III, m. 79-80.degree. (Et2O). p-PhNHC6H4NHPh (13 g.), 18.5 g. V, and 6 g. AcOH was heated at 60-5.degree. 48 hrs., the mixt. was shaken with 250 cc. H2O and extd. with Et2O. Powd. NaOH (20 g.) was added to the Et2O layer and the mixt. was refluxed 2 hrs. to give 7.2 g. IV, m. 70-1.degree. (Et2O). Similarly, 22.1 g. II, b3-4 182-4.5.degree., was obtained from 37 g. V after 55 hrs. V (37 g.), 36.6 g. 4-MeC6H4NHPh, and 12 g. AcOH was heated at 60-3.degree. 50 hrs., the mixt. treated with H2O and extd. with Et2O, and the Et2O was removed. The residue was dissolved in 180 cc. MeOH, 9.8 g. NaCN was added and the mixt. was heated 1 hr. at 60-4.degree. to give 36% p-MeC6H4NPhCH2(OH)CH2R (VII, R = CN) (VIII), m. 70-1.degree. (MeOH). Similarly, 26% p-[NCCH2CH(OH)CH2NPh]2C6H4, m. 163-4.degree. (Et2O), was obtained. VIII (1.3 g.), 7 cc. MeOH, 2 cc. H2O, 0.4 g. NaOH, and 5 cc. 10% H2O2 was heated at 47-50.degree. 20 min. to give 42% VII (R = CONH2), m. 134-5.degree. (MeOH). VIII (2.6 g.), 8 cc. alc., 1.6 g. NaOH, and 5 cc. H2O was heated at 100-5.degree. 4 hrs. to give 53% VII (R = CO2H), m. 79-80.degree. (alc.).

IT **21471-79-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 21471-79-4 CAPLUS

CN 2-Propanol, 1-[N-(o-aminophenyl)anilino]-3-chloro-, monohydrochloride (8CI) (CA INDEX NAME)



● HCl

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